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Catalogue of the described **TENTHREDINIDÆ** and **URO CERIDÆ** of  
North America.

BY EDWARD NORTON.

[Continued from Vol. 1, page 280.]

51. **TAXONUS**, Meg.*Taxonus*, Meg. von Muehlfeld.

*Wings* with two marginal and four submarginal cells, the second and third each receiving a recurrent nervure; bullæ as in *Allantus*.

*Antennæ* 9-jointed, generally shorter than to abdomen, filiform, with the end joint obtuse.

*Head*: nasus more or less emarginate, the corners sometimes produced; labrum bluntly rounded; mandibles short and thick, with or without a simple inner tooth, seldom with more small teeth; fourth joint of palpi longest.

*Abdomen* long, sometimes flattened, polished.

It is difficult to specify the external distinction between *Taxonus* and *Strongylogaster*.

## Tribe 1. Hartig.

Lanceolate cell with oblique cross-line, under wings without middle cells.

1. **T. nigrisoma**.

*Taxonus nigrisoma*, Norton, Bost. Proc. ix, 1862, 119. ♀.

Blue-black, the legs dark rufous. Length 0.30. Br. wings 0.60 inch.

♀. Color blue-black; abdomen rather long, flattened, acute; antennæ slender, basal joint enlarged, third longer than fourth, apical joint as long as the preceding; clypeus angulate emarginate; labrum and base of mandibles pale rufous; legs rufous or honey-yellow; base of coxæ and tarsi black; wings faintly clouded, stigma and costa black.

Mass. (Harris Coll.). Dorchester, Mass. (F. G. Sanborn.)

Three specimens. Not common.

2. **T. uncinatus**.

*Taxonus uncinatus*, Norton, Bost. Proc. ix, 1862, 119. ♀.

Color black, a rufous band on third and fourth segments of abdomen. Length 0.30. Br. wings 0.60 inch.

♀. Black, body long and slender; antennæ: third joint longer than fourth, the flagellum rufous beneath; head polished, lower ocellus in a long basin ending in a blunt projection between antennæ, nasus deeply incurved; third joint of palpi longest, the fifth springing from the fourth at one side of apex; mouth yellowish; tegulæ, coxæ and trochanters white; a spot at the tips of first and second, the third and fourth segments of tergum and the second segment of venter, yellow-red; base of coxæ, the anterior coxæ above, and the posterior tarsi, black; wings hyaline; marginal cross-nervure straight, stigma and costa black.

♂. Flagellum beneath rufous towards the tip; the three basal segments of abdomen rufous, legs paler before than those of female, only the tips of posterior tarsi black; marginal cross-nervure curved; base of stigma and costa pale.

Farmington, Conn. Not common.

This may ultimately prove to belong to *Strongylogaster*.

### 3. *T. multicolor*.

*Strongylogaster multicolor*, Norton, Bost. Proc. ix, 1862, 120.

Testaceous; base of antennæ, vertex and thorax black: head, a spot on pleura and the coxæ yellow. Length 0.24. Br. wings 0.42 inch.

♂.—Body slender, not long; antennæ short, compressed, third joint hardly longer than fourth, color testaceous, paler at tip; the two basal joints black; head yellow, with a large black vertical spot, orbits yellow; tegulæ, collar, a wide stripe across pleura, coxæ and base of femora yellow; remainder testaceous; wings hyaline, basal half of stigma waxen; under wings without inner cell, outer cell not closed.

♀.—Antennæ black, slightly serrate toward the tip as in the male. nasus deeply notched. Head and thorax black where it is testaceous in the male, outer orbital line interrupted with black, each segment of tergum with a triangular black spot, widest toward apex and in its middle. Tarsi blackish above.

Maryland, (Uhler.) Taken May 28. Canada, (L. Provancher.) 2 ♂. 1 ♀.

### Tribe II.

Lanceolate cell with oblique cross-line; underwing with two inner cells.

### 4. *T. dubitatus*.

*Taronus dubitatus*, Norton, Bost. Proc. ix. 1862, 119. ♀ ♂.

Color yellow-red; head and metathorax black in ♀; part of thorax and tergum black in ♂. Length 0.24—.26. Br. wings 0.48—.55 inch.

♀.—Color yellow-red, body very slender; antennæ slender, black, first joint globose, not much larger than second, third and fourth joints equal; head, polished black; eyes widely separated; each of the ocelli in a distinct, circular, shining basin; clypeus slightly emarginate, labrum retracted, both white; mandibles and palpi yellowish; scutel, metathorax and basal plates, blackish; posterior tibiæ, except at base, and tips of all the tarsi above, blackish; spurs short, obtuse, claws without perceptible inner tooth; wings hyaline, edges of stigma and costa black.

♂.—The male has the apex of flagellum pale beneath; abdomen slender and compressed; upper half of pleura, apical half of abdomen, and the sides of the basal half above, black; coxæ and trochanters whitish; posterior tibiæ like the others, with only the apical joints of the tarsi and the claws black.

Massachusetts, Connecticut, New Jersey, Illinois.

A specimen from Illinois has the mesothorax black. (Coll. Amer. Ent. Soc.)

Three specimens, May 19th, on three different plants of one of our tall ferns, (*Osmundi*), when taken, they feign death, folding the antennæ, as well as the legs, upon the breast.

5. *Taxonus amicus*, n. sp.

Black; mouth and trochanters white; tegulæ, collar and abdomen yellow-red. Length 0.24. Br. wings 0.52 inch.

♀. Black, body slender; antennæ moderate, each of the ocelli in a basin, nasus emarginate, and with labrum white; tegulæ, collar and abdomen pale reddish-yellow, apical segments brownish; pleura and breast clear piceous, base of coxæ and middle of femora the same color; apex of coxæ, trochanters, both ends of femora and base of tibiæ, white, remainder of tibiæ and of all the tarsi piceous; wings hyaline, faintly clouded.

♂. The male has the anterior angle, thorax above and abdomen, except a rufous band on the second, third and fourth segments, black; pleura and pectus piceous-brown; hinder femora and tibiæ, black; basal third of tibiæ whitish.

Canada. (Coll. Amer. Ent. Soc.) One ♀, one ♂.

This may be a variety of *T. dubitatus*.

6. *Taxonus albido-pictus*, n. sp.

Black, the abdomen of female banded with rufous, the collar, the hinder tibiæ and first tarsal joint banded with white. Length ♀ 0.32, ♂ 0.25. Br. wings 0.56 and 0.46 in.

♀.—Shining black, polished. Antennæ two-thirds the length of body, slender, third and fourth joints of equal length. Nasus slightly incurved and with the labrum white; palpi tinged with rufous, tegulæ and collar white; the lower half of pleura, the pectus, the apex of the first, the second and basal half of third segments of same color, their trochanters, the base of tibiæ and basal half of first tarsal joint pure white; apical joints of the four anterior tarsi blackish, the apex of their tibiæ obscure, the intermediate tibiæ obscure above, apex of hinder femora and the remainder of their tibiæ and tarsi black. Wings hyaline, faintly clouded.

♂.—Resembles female. Abdomen slender and flattened.

♂ Var.—Antennæ shorter, basal joint stouter, the abdomen wholly black, the hinder tibiæ beneath rufous.

Illinois (B. D. Walsh), Virginia, (Coll. Am. Ent. Soc.)

52. **STRONGYLOGASTER**, Dahlb.*Strongylogaster*, Dahlb., Consp. Tenth, 1835.

Hartig, Die Blattw.

*Wings* as in *Taxonus*; with or without oblique cross-line; under wings with two inner cells; under wings of males often with either one or no middle cells.

*Antennæ* 9-articulate, not longer than to abdomen, filiform.

*Head* globular, punctured like the thorax; clypeus notched; labrum small, roundish; mandibles short and thick, with two inner teeth; the inner labrum generally somewhat horny, rounded, hairless; the second joint of palpi wanting or smaller, third constricted.

*Abdomen* generally lengthened, cylindrical.

*Table to assist in finding the species.*

Tribe 1.—Lanceolate cell with oblique cross-line; under wing of ♀ with two inner cells, of ♂, none:

A. Under wings with incomplete outer cells:

a. Antennæ at apex white:

Head testaceous. Two lobes of mesothorax black.....1. **terminalis**.

Head testaceous. Three lobes of mesothorax black.....2. **mellosus**.

Head black; orbits partly white.....3. **pallidicornis**.

Head black. Thorax black, scutellum pale.....4. **apicalis**.

b. Antennæ at base pale.....5. **epicera**.

c. Antennæ wholly black:

Thorax black.....6. **rufocinctus**.

Thorax black, the anterior lobe and pleura rufous.....7. **pallipes**.

B. Under wings with complete outer cells:

Head black.....8. **pinguis**.

Tribe 2.—Lanceolate cell without cross-line; under wings with two inner cells:

*Species from North America.*

Head and thorax black:

Abdomen rufous.....9. **tacitus**.

Abdomen rufous; base of antennæ pale.....10. **rufescens**.

Abdomen long, rufous, base black.....11. **longulus**.

Abdomen with a dark band at base of each segment.....12. **distans**.

13. **annulosus**.

Abdomen with a pale band at base of each segment.....14. **multicinctus**.

Head black; thorax and abdomen mostly reddish-yellow...15. **unicus**.

*Species from Mexico.*

Testaceous; abdomen with a double row of black dots:

Antennæ pale at base.....16. **meritorius**.

Antennæ black.....17. **nigritorius**.

Black; thorax spotted; abdomen banded with white;

pleura pale.....18. **illuminatus**.

Black; a yellow stripe on middle of abdomen.....19. **fulviventris**.

Black; a yellow stripe across pleura.....20. **lineatus**.

Black; mouth, collar, and bands on legs white.....21. **nigricans**.

Wholly black; legs pale before.....22. **nigredo**.

## Tribe 1.

1. *S. terminalis*.

*Tenthredo terminalis*, Say, Long's 2nd Exp. ii, 1824, 318.

*Allantus terminalis*, Norton, Bost. Jour. vii. 236, i.

*Strongylogaster terminalis*, Norton, Bost. Proc. ix. 120.

*Allantus melisoma*, Harris, Cat.

Testaceous; tips of antennæ and scutel yellow-white, part of mesothorax and pectus black. Length 0.46. Br. wings 0.80 inch.

♀—Color testaceous; body quite long, abdomen flattened, the basal joint of antennæ more than twice as long as second; third longer than fourth, apical joint pointed, the two basal joints testaceous, the three next black, the four apical joints white; head wide and thick, polished, nasus deeply incurved, labrum concave, rounded, all reddish-yellow; scutel, a line behind, and postscutel, whitish; a spot back of ocelli, the two side lobes of mesothorax, the sutures of first and second segments of tergum, and the pectus, black; coxæ blackish, with a white spot, sometimes indistinct, on the upper side; tips of posterior femora and sometimes of tibiæ black; wings slightly clouded, basal half of stigma whitish.

Mass., Conn., N. J., Pa., West Va.

Common. A variety from the Kanawha Valley, (Coll. Am. Ent. Soc.) is smaller, has the basal joints of antennæ almost black; the vertex, most of metathorax and the pleura (except a variable central spot) black; tips of all the coxæ, trochanters and base of femora white. The amount of black is variable.

2. *S. mellosus*.

*Tenthredo terminalis*, ♂, Say, Long's 2nd Exp. ii. 1824, 318.

*Allantus mellosus*, Norton, Bost. Jour. vii. 1860, 237, 2.

*Strongylogaster mellosus*, Norton, Bost. Jour. ix. 120.

Testaceous; tips of antennæ, V-spot, scutel, and two spots on pleura, white; mesothorax and pectus black. Length 0.37—0.45. Br. wings 0.67—0.80 inch.

♀.—Color and form of body as in *S. terminalis*; the two basal joints of antennæ testaceous, the three next black, and the remainder white, the apex at times brown; nasus and beneath, a minute dot at edge of occiput, back of ocelli, sometimes a spot more or less distinct at summit of inner orbit, white; tegulæ, collar, V-spot scutel and line behind and a small spot or two on pleura, yellow-white; an irregular lobate spot about and back of ocelli, the metathorax, a band at junction of first segment and the breast, black; legs testaceous, apex of all the coxæ, most part of hinder pair, and the trochanters white; base of coxæ and tips of hinder femora black; wings as in *S. terminalis*.

♂.—The male has the two basal joints of antennæ white above; apical half of fifth joint pale; head pale instead of testaceous; pleura almost entirely white; abdomen and legs paler than the female; hinder wings with no middle cells, outer cells complete, a nervure slightly bent at intersections running around the apical margin; second brachial and lanceolate cell extending to margin.

Mass., Conn., Pa.

Perhaps this should be called a variety of *S. terminalis*, but the dot back of ocelli, white collar, the V-spot and spot beneath wings, and are permanent differences in this. The male is described by Say as the male of *S. terminalis*.

The position of the outer marginal under wing nervure is like that of *Perineura*, Hartig, (Plate V, fig. 42), but this is throughout close to the outer margin.

### 3. *Strongylogaster pallidicornis*, n. sp.

Antennæ at tip, outer orbits, tegulæ and scutel white; head and thorax black; abdomen, spot on pleura and legs rufo-testaceous. Length 0.36. Br. 0.74 inch.

♀.—Body as in *S. terminalis*; head and thorax black; antennæ black, the four apical joints white, basal joint piceous; an angular orbital spot on each side of ocelli, a narrow line around the outer edge of head, the mouth, tegulæ, collar, V-spot, scutel, postscutel, upper edge of metathorax, and a dot below all four tegulæ, white; a large angular spot on pleura, back of metathorax, basal plates and abdomen and legs rufo-testaceous; coxæ black, white at apex and a white spot on posterior pair; wings smoky hyaline, base of stigma waxen.

Brooklyn, N. Y. (J. Akhurst.) One specimen.

### 4. *S. apicalis*.

*Allantus apicalis*, Say, Bost. Jour. I. 1835, 216, 3.

*Allantus abdominalis*, Norton, Bost. Jour. vii. 238, 4, ♀ ♂.

*Strongylogaster abdominalis*, Norton, Bost. Proc. ix. 120.

*Strongylogaster apicalis*, Norton, Bost. Proc. ix, 120.

Black; tips of antennæ and scutel white; abdomen testaceous. Length 0.30—0.37. Br. wings 0.65—0.75 inch.

♀.—Abdomen flattened, acute; antennæ with the four apical joints white; head large, polished as in *S. terminalis*; head and thorax black; nasus deeply incurved; nasus and mouth beneath, tegulæ, scutel and spot behind, pale yellow; abdomen and legs testaceous, coxæ black; tips of posterior pair and most part of trochanters, white; base of four anterior femora and apex of posterior pair black; wings faintly clouded, base of stigma pale.

♂.—The male has the color of venter and legs paler than with fe-

male; apical segment of abdomen sometimes blackish; under wings with no middle cells, outer cells complete as in *S. mellosus*. ♂.

Conn., N. Y.

Common. In one case the under wings of the female have but one middle cell. Say's description of this is very incomplete. He stated that the coxæ are white, which is not the case with any yet seen.

5. *S. epicera*.

*Allantus epicera*, Say, Bost. Jour. I. 1835., 216., ♂.

Norton, Bost. Jour. vii. 243, 15, ♂ ♀.

*Strongylogaster epicera*, Norton, Bost. Proc. ix. 120.

"Black; abdomen, base of antennæ and feet honey-yellow." Length 0.32. Br. wings 0.63 inch.

♂ ♀.—Body not very stout; abdomen of ♀ flattened; antennæ not longer than base of thorax; the two basal joints, and the third and fourth above rufous; third one-half longer than fourth; nasus wide, incurved, coarsely punctured; mouth, tegulæ, collar, abdomen and legs rufous or honey-yellow; apical segments of abdomen sometimes blackish; coxæ black, their tips and the trochanters pale; wings faintly clouded: under wings of males without middle cell, outer cells complete as in *S. mellosus*.

Conn., N. J., Ia. (Say).

Say described only the male.

6. *S. rufocinctus*.

*Allantus rufocinctus*, Norton, Bost. Jour. vii. 1860, 248. 25. ♂ ♀.

*Strongylogaster rufocinctus*, Norton, Bost. Proc. ix. 120.

Black; the five basal segments of abdomen and the legs rufous. Length 0.30—0.35. Br. wings 0.62—0.70 inch.

♂ ♀.—Shining black, rather long; head polished, wide, large, sutures deep; nasus incurved, face black; labrum in some cases piceous; tegulæ yellowish, basal plates black; the first four segments of abdomen and the legs rufous; coxæ, trochanters, tips of posterior tibiæ and their tarsi, black; in some cases the apical half of the four posterior coxæ and their trochanters are white, and the apical segment of abdomen rufous; wings faintly clouded, base of stigma white, under wings of female with one inner cell; of the male none; the outer cells incomplete, the second brachial and lanceolate cell not reaching margin of wing.

Ct., Md., West Va.

In specimens from Maryland and West Virginia, the apical segment of the abdomen is rufous.



7. *S. pallipes*:

*Allantus pallipes*, Say, West. Quart. Rep. ii. 1823, 1, 72.

Norton, Bost. Jour. vii. 243, 16.

*Strongylogaster pallipes*, Norton, Bost. Proc. ix. 120.

"Black; thorax rufous before; feet white." Length seven twentieths of an inch.

Body black; labrum and palpi white; thorax with a rufous triangle before, a rufous spot on each side of the disk, another beneath the origin of the wing, and tip of the scutel, rufous; a whitish spot before the wings; wings a little dusky; carpus whitish; feet white; posterior thighs blackish in the middle; tergum with the lateral basal margin of the segments rufous; venter rufo-testaceous on each side, dusky in the middle.

Missouri.

The tegulæ and prothorax, and a stripe across the middle of pleura are rufous, the coxæ and trochanters white; hinder femora black at tips only; under wings with two middle cells.

(Connecticut, (August); West Virginia. Not common.

8. *S. pinguis*.

*Allantus pinguis*, Norton, Bost. Jour. vii. 1862, 244, 17, ♀.

*Strongylogaster pinguis*, Norton, Bost. Proc. ix, 120.

Black, antennæ mostly waxen-yellow, scutel white, abdomen testaceous. Length 0.30. Br. wings 0.60 inch.

♀.—Body short and stout as in *Macrophya cestus* and *goniphorus*; head and thorax black; antennæ flattened, rather serrate, waxen-yellow; second joint one-third the length of first, its basal half black; head wider than in *S. terminalis*, nasus slightly emarginate, neck produced, pleura with very large deep pits; mouth, tegulæ, scutel and postscutel whitish, (sometimes rufous,) abdomen and legs rufous or testaceous; basal plates black; coxæ black, tips and trochanters pale, the four anterior legs pale, apex of hinder femora and of tibiæ black; inner anterior spur very long and bluntly bifid, claws large, thick at base, with a circular hollow below inner tooth; wing ample, wide, faintly clouded; under wings with two inner cells, outer margin of outer cells with fractured outer nervures.

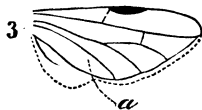
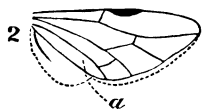
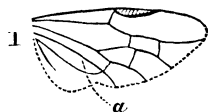
♂.—The abdomen of male is very short and stout, rounded at apex; anterior lobe of thorax and two edges of collar rufous, antennæ stouter, appearing almost filiform, like *Urocerus*; the outer cells of under wings all complete, having an outer nervure following the whole apical margin of the wing; no inner cell; the first brachial joining the marginal cell, as in *S. mellosus*.

Var. *a*. ♀.—Antennæ black; labrum, scutel and the four anterior

legs below the knees and the tarsi white, the femora chesnut-red Westfield, Mass.

Conn., Mass. 2 ♂, 2 ♀.

The under wings have the lanceolate cell extending to the margin of the wing, as in fig. 2 *a*, and all the outer marginal cells complete in the males; with the females these outer nervures are present, but are broken in several places.



This insect differs much from the other species of *Strongylogaster* in its antennæ, its shortened abdomen, and in its under wing lanceolate cell, which in this genus, as well as *Allantus* and *Tenthredo*, is formed as in fig. 1 *a*. The cell is usually shorter in *Selandria*, *Macrophya* and *Taxonus* and does not reach the cross nervure of the brachial cell above. It differs from *Perineura*, Hartig, in having its upper wing lanceolate cell with an oblique cross-line, and its under wing with an inner and outer apical cell.

Fig. 1. Typical under wing of *Allantus*, *Strongylogaster* and *Tenthredo*.

Fig. 2. Under wing of *Strongylogaster pinguis* ♂.

Fig. 3. Under wing of ♂ *Strongylogaster mellosus*, *apicalis*, *epicera*, and of *Perineura*, Hartig.

### Tribe. 2.

#### 9. *S. tacitus*.

*Allantus tacitus*, Say, Harris Cat.

Norton, Bost. Jour. vii. 1860, 246, 20.

*Strongylogaster tacitus*, Norton, Bost. Proc. ix. 120.

Black; abdomen rufous; wings violaceous. Length 0.30—0.34. Br. wings 0.60—0.68 inch.

♂.—Body rather stout, obtusely rounded at apex; antennæ moderate, flattened from base, third and fourth joints equal; eyes not as prominent as in Tribe 1; face and pleura coarsely punctured; nasus not deeply emarginate, face black; basal membrane black, abdomen chesnut-red; legs black, tips of anterior femora and base of tibiæ piceous; wings violaceous, subopaque, under wings with two middle cells.

♀.—The female sometimes has a faint rufous tinge on the inner orbits near the antennæ; basal joint of palpi rufous above; remainder piceous; tegulæ piceous; abdomen paler than in male; anterior tibiæ and tarsi piceous.

Mass., (Harris Coll.), Conn., N. Y., Canada.

10. *S. rufescens*.

*Allantus rufescens*, Norton, Bost. Jour. vii. 245, 19. ♀;

*Strongylogaster rufescens*, Norton. Bost. Proc. ix. 120.

Black; vertex and thorax, antennæ, orbits, abdomen and legs, dark rufous; mouth, collar and scutel, yellow. Length 0.40. Br. wings 0.80 inch.

♀.—Dull; head wide and slightly roughened at apex; antennæ dark rufous, rather stout, the two basal joints red; vertex black from back of head to clypeus; upper half of orbits rufous; a spot between and beneath antennæ, lower half of orbits and mouth, yellow; clypeus produced, incurved, thorax black; edge of collar, scutellum and a spot on pleura at base of coxæ, yellow; middle of pleura indistinctly rufous; abdomen and legs dark rufous; anterior coxæ at base, posterior coxæ, trochanters, femora, tips of tibiæ above and tips of intermediate femora black; tarsi pale reddish-yellow, wings smoky in middle, stigma, costa and tegulæ piceous.

Maine, (Harris Coll.). One ♀.

11. *Strongylogaster longulus*, n. sp.

Black; tegulæ and anterior angle whitish; abdomen rufous; wings hyaline. Length 0.32—.36. Br. wings 0.64—.68 inch.

♀.—Black; abdomen slender, much lengthened; antennæ short, rather stout, flattened, setaceous, third joint hardly longer than fourth; head and pleura coarsely pitted; channels at sides of ocelli not reaching back of head; labrum retracted, rufous; thorax black; tegulæ and anterior angle, whitish; abdomen rufous, a black band on first and second segments of tergum; legs waxen-yellow; base of coxæ black; wings hyaline, faintly clouded at apex, nervures piceous, apical half of stigma and costa beyond, pale; under wings with two middle cells.

Var.—Abdomen black, with a large reddish-yellow spot on the second, third and fourth segments above and beneath.

Norway, Me., (Cambr. Mus. S. I. Smith's Coll.); Brunswick, Me. (A. S. Packard, Jr.); Mass., (Coll. Amer. Ent. Soc.). Three ♀.

12. *Strongylogaster distans*, n. sp.

Black, tegulæ and anterior angle whitish, abdomen rufous, black banded. Length 0.32. Br. wings 0.64 inch.

♀.—Black; antennæ, head and thorax as in *S. longulus*; palpi whitish; abdomen testaceous, tip of each segment pale; the basal half of each segment black, venter almost brown; legs dirty white; coxæ black, except at tips; base of all the femora and apical half of posterior tibiæ, with their tarsi black-brown; wings smoky-hyaline, nervures yellowish; second recurrent nervure received near base of third sub-marginal cell.

California, (Cambr. Mus. Coll. by A. Agassiz, Jr.). Two specimens.

13. *S. multicinctus*.

*Strongylogaster multicinctus*, Norton, Proc. Ent. Soc. Phil. I. 1862, 143. ♀.

Black, with whitish abdominal bands. Length 0.34. Br. wings 0.68 inch.

♀.—Black; body long and rather slender; antennæ hardly longer than thorax, somewhat thickened in middle, the apical joint decreasing in size, third joint longer than fourth; head and face dull, rough with coarse pits; palpi pale, face black; basal half of each segment of abdomen straw-yellow; ovipositor sheath fringed with pale hair; legs black, tips of femora, the tibiæ and tarsi pale reddish, posterior knees almost white, anterior tibiæ spur bluntly bifid, the other spurs short; wings hyaline, stigma and costa pale.

Virginia, (Coll. Amer. Ent. Soc.). One ♀.

14. *Strongylogaster annulosus*, n. sp.

Black; labrum, tegulæ, anterior angle and basal plates white: bands on each segment of abdomen, rufous. Length 0.40. Br. wings 0.76 inch.

♀.—Black, body long and slender; antennæ and punctures as in *S. multicinctus*; a spot in middle of labrum, the palpi, tegulæ, the whole of anterior angle and basal plates, whitish; basal half of each segment of tergum piceous, wider at sides beneath; apical half of each segment and all the venter, reddish-yellow; ovipositor sheath black, fringed with long hair; legs reddish-yellow, coxæ and base of femora black; all the knee joints with base of tibiæ whitish.

Var. *a*. ♀.—Base of each segment of tergum honey-yellow; apex white.

Massachusetts, (Coll. Amer. Ent. Soc.). Two ♀.

15. *S. unicus*.

*Strongylogaster unicus*, Norton, Bost. Proc. ix. 1862, 120.

Luteous; head and legs black; wings subviolaceous. Length 0.28. Br. wings 0.56 inch.

♀.—Luteous or yellow-red; body slender; antennæ black, short, stout, third and fourth joints equal; face deeply pitted; nasus with an angular notch; face black; mandibles rufous; tegulæ, edge of collar, basal plates, ovipositor sheath, and legs black; anterior part of femora and tibiæ rufous before; wings sub-violaceous, with two under wing inner cells.

Brooklyn, N. Y. (J. Akhurst.) One ♀.

16. *Strongylogaster meritorius*, n. sp.

Testaceous; head and thorax mostly black; dots on abdomen and apex blackish, wings hyaline. Length 0.26—.32. Br. wings 0.54—.68 inch.

♀.—Testaceous, body rather stout, not unusually long; antennæ moderate, slender, black, basal joint white; third joint one-half longer than fourth; head black, shining; nasus not emarginate, and with labrum

white; two brown or black vittæ on side lobes of mesothorax; seven blackish dots on each side of tergum; legs pale testaceous; apex of hinder tibiæ and their tarsi blackish; wings hyaline, stigma and costa black.

♂.—Dots on each side of tergum in male indistinct: the two apical segments of abdomen blackish; under wings with two middle cells.

Cuantla, tierra Caliente. (H. de. Saussure.) 2 ♀, 8 ♂.

17. **Strongylogaster nigritorius**, n. sp.

Testaceous; head and thorax mostly black; dots on the abdomen and apex blackish; wings hyaline. Length 0.26—.32. Br. wings 0.54—.68 inch.

♂ ♀.—Testaceous; abdomen stout, compressed, not widened beyond middle; antennæ moderate, basal joint sometimes tipped with white; head black, nasus and mouth below whitish; thorax black; tegulæ, edge of collar, scutel, a spot on pleura (size variable, sometimes most of pleura,) testaceous; dots at each side of each segment of tergum and two apical segments black; legs testaceous, hinder tibiæ and the tarsi more or less blackish; wings hyaline, stigma and costa piceous.

Var.—Thorax sometimes testaceous, with two vittæ.

Cuantla, t. c. Mexico. (H. de. Saussure.) 1 ♀, 9 ♂.

This is probably a variety of *S. meritorius*, from which it differs in the black basal joint of antennæ, in the thorax being mostly black.

18. **Strongylogaster illuminatus**, n. sp.

Black, with base of antennæ, mouth, tegulæ, collar, V-spot, scutel and spot on pleura white; abdomen testaceous with paler bands. Length 0.28—.32. Br. wings 0.64—.66 inch.

♂ ♀.—Three colors; body of ♀ not stout, of ♂ slender; antennæ moderate, basal joint white; head black; nasus and mouth beneath white, thorax black; tegulæ, prothorax, large V-spot, scutel, basal plates and a large irregular spot on pleura white; abdomen testaceous, with a brownish band across each segment of tergum; legs testaceous; femora darker at base; apical tarsi obscure; wings hyaline, faintly smoky, nervures piceous, stigma pale testaceous.

Cordova, t. c. Mexico. (H. de. Saussure.) 1 ♂, 1 ♀.

19. **Strongylogaster fulviventris**, n. sp.

Black; mouth, tegulæ, collar, middle of tergum in ♀, and part of venter orange-yellow. Length 0.24—.32. Br. wings 0.50—.64 inch.

♀.—Black; body stout, apex of abdomen not acute; antennæ slender, longer than thorax; third joint longer than fourth; head wider, nasus and mouth, below tegulæ, a wide mark on collar, coxæ and trochanters straw-yellow; a stripe down the middle of tergum, and all the venter except apex, orange-red, femora the same color, paler before;

the tibiæ white; a spot on tips of femora above, and a line down all the tibiæ black, apex of posterior tibiæ and all the tarsi blackish, apical joint white; wings hyaline, faintly clouded; stigma and nervures black.

♂.—The male has the tergum black; with an obsolete rufous stripe down the middle; only the base of venter rufous and less of black upon the legs.

Angang, Mexico. (H. de. Saussure). 2 ♀, 4 ♂.

20. **Strongylogaster lineatus**, n. sp.

Black; mouth, tegulæ, most of anterior angle, a line on pleura and most of venter reddish-yellow. Length 0.26. Br. wings 0.54 inch.

♂ ♀.—Black; body slender; antennæ slender, somewhat enlarged on middle; nasus and mouth below white; tegulæ, most of anterior angle, a longitudinal stripe on pleura, and a large spot on venter, covering four or five basal segments, reddish-yellow; legs the same color; a spot on tip of femora and a line down the four hinder tibiæ blackish; tarsi black; wings hyaline, stigma black.

Angang, Mexico. (H. de. Saussure.) 1 ♀, 3 ♂.

In the male the outer discoidal and apical cells are closed.

21. **Strongylogaster nigricans**, n. sp.

Black; mouth, collar, and bands on legs white. Length 0.24—.32. Br. wings 0.54—.64 inch.

♀ ♂.—Shining black; body slender; antennæ slender, not longer than thorax, third joint longer than fourth; nasus slightly incurved, and with the mouth beneath white; the edges somewhat blackish; tegulæ and collar white; remainder of body black; legs mostly white; two-thirds of coxæ, a line down the anterior legs above, a band on the medial femora, interrupted before, a wide band on posterior femora, apex of four posterior tibiæ, and the posterior tarsi black, the base of first joint white; wings faintly clouded, stigma and costa black.

Cuantla, tierra fav., Mexico. (H. de. Saussure.) 3 ♀, 3 ♂.

22. **Strongylogaster nigredo**, n. sp.

Black; legs white before; wings obscure. Length 0.28. Br. wings 0.58 inch.

♂.—Shining black; body slender; antennæ moderate, formed as in *Macrophya* and *Selandria*, enlarged in middle; mouth black, palpi pale; legs black, coxæ and trochanters black, anterior legs whitish before, a white band on the four posterior tibiæ, interrupted by a slender black line above; wings obscure blackish, stigma and nervures black.

Var.—Hinder tibiæ almost entirely dark.

Toluca, (H. de. Saussure.) Mex., 6 ♂.

53. **PÆCILOSTOMA**, Dahlb.*Pecilostoma*, Dahlbom.

Hartig, die Blattw. 302, Sec. 3.

*Wings* as in *Tenthredo*, two marginal and four submarginal cells, the second and third each with a recurrent nervure. Lanceolate cell open at shoulder, with oblique cross-line; under wings with one inner cell.

*Antennæ* 9-articulate, not longer than base of abdomen, generally filiform.

*Head* somewhat rounded as in the previous Section; body generally cylindrical, abdomen compressed, somewhat broader at the fifth or sixth segment; nasus slightly emarginate; labrum rounded; labium as in *Tenthredo*, the first joint of maxillary palpi almost wanting; mandibles thick, below the tip with a sharp tooth.

1. **Pæcilstoma inferentia**, n. sp.

Black, edges of ventral segments whitish; wings hyaline. Length 0.28. Br. wings 0.48 inch.

♂.—Black; body long, antennæ short, not longer than to scutel, flattened, third joint longest; nasus moderately notched, a tooth in notch on each side, making it appear 3-notched; mandibles stout, with a large tooth near the point; labrum, tegulæ, edge of collar, edges at sides of each segment of abdomen, white; abdomen flattened, not stout; legs black, tinged with piceous; trochanters, base and tips of femora, whitish; all the legs before obscure white; spurs very short, inner claw tooth near the middle of claws; wings clouded hyaline, stigma piceous.

Farmington, Ct. One ♂.

It is possible that *Strongylogaster rufocinctus* belongs to this Section, as its wings would lead to infer, but the general structure of the antennæ and head is more like that of the species with which it is placed.

54. **PERINEURA**, Hartig.*Perineura*, Hartig, Die Blattw. 1860, 303, Sec. 4.

*Wings* with two marginal, and four submarginal cells, the second and third each with a recurrent nervure. Lanceolate cell closed in middle; under wings without middle cell, all the outer cells closed by outer cross nerves near the margin of wing.

Upper lip deeply emarginate, with prominent side angles; labrum large.

Remainder as in *Tenthredo*.

Europe.

It is possible that the first six species of *Strongylogaster*, of which the males have the under wing without inner cells and the outer cells closed, may be included in this genus, of which only one European species is yet described.

55. **TENTHREDO**, Leach.

*Tenthredo*, Leach, Zool. Misc. 1814.

Hartig, Die Blattw. 303, Sect. v.

(All.) Fam. vi, Klug. Berl. Mag. vii, viii.

*Wings* with two marginal and four submarginal cells, the second and third each with a recurrent nervure. Lanceolate cell open at the shoulder, with a straight cross-line. Bullæ as in *Allantus*. Under wings with two middle cells.

*Antennæ* 9-jointed, long and slender, generally longer than base of abdomen and testaceous, sometimes shorter and filiform; joints usually enlarged at tips, second joint not half as long as first, third longer than fourth.

*Head* large, as wide as thorax, incurved behind, more extended between eyes and summit than in *Macrophya*; usually there are two deep channels at sides of ocelli, from antennæ to summit, with a cross channel back of ocelli, and a basin from lower ocellus to between the antennæ. The nasus is deeply emarginate, produced, and the labrum produced and rather pointed; mandibles lengthened, pointed, with two or three inner teeth; maxillæ with a long horny tooth on the inner side; the second joint of the palpi is sometimes apparently wanting.

*Body* long; abdomen beyond the middle in females distinctly widened.

*Legs* rather long; spurs of tibiæ long and sharp, inner spur of anterior tibiæ obtuse, deeply bifid, often with an obtuse inner division, while that of *Macrophya* is sharp.

*Table to assist in determining species.*

A.—Body long:

- |  |                        |
|--|------------------------|
| Antennæ pale at apex.....                            | 1. <b>grandis</b> .    |
| Antennæ wholly pale.....                             | 2. <b>mellinus</b> .   |
| Antennæ pale at base:                                |                        |
| Pleura and pectus rufous.....                        | 3. <b>xanthus</b> .    |
| Pleura and pectus black.....                         | 4. <b>ruficolor</b> .  |
| Antennæ wholly black or ferruginous:                 |                        |
| Head above antennæ more or less yellow;              |                        |
| Abdomen yellow or yellow banded.....                 | 5. <b>verticalis</b> . |
| Abdomen black.....                                   | 6. <b>lobatus</b> .    |
| Abdomen black above; pleura black.....               | 7. <b>angulifer</b> .  |
| Abdomen black above; an angulate spot on pleura..... | 8. <b>verticalis</b> . |
| Abdomen partly rufous:                               |                        |
| Pleura and pectus pale.....                          | 11. <b>eximius</b> .   |



- Spot on pleura, pectus pale.....9. *angulatus*.  
 Pectus pale.....16. *variegatus*.  
 Pectus black.....10. *formosus*.  
 Pleura and pectus black.....12. *dissimilis*.  
 Head above antennæ black:  
 Abdomen mostly rufous:  
 Spot on pleura:  
 Pectus pale:  
 Posterior femora and tibiæ in middle rufous.....13. *signatus*.  
 Posterior femora black above, tibiæ banded with  
 rufous.....14. *variatus*.  
 Posterior femora black above, tibiæ banded with  
 yellow; venter pale.....15. *pleuralis*.  
 Posterior femora black above, tibiæ black above.....16. *variegatus*.  
 Posterior femora rufous, apical half of tibiæ  
 black .....17. *rufopedibus*.  
 Pectus black.....18. *varipictus*.  
 No mark on pleura:  
 Pectus pale:  
 Posterior femora rufous.....19. *varians*.  
 Posterior femora black.....21. *discrepans*.  
 Pectus black:  
 Posterior femora rufous.....23. *mutans*.  
 Posterior femora black, tibiæ rufous.....20. *semirufus*.  
 Posterior femora and tibiæ black:  
 A yellow spot above coxæ.....22. *tricolor*.  
 Apical half of abdomen rufous; wings clear.....24. *semirubra*.  
 A piceous band on abdomen; wings clear.....25. *piceocinctus*.  
 Apex of abdomen rufous; wings obscure.....34. *attractus*.  
 Middle of abdomen rufous; wings violaceous.....33. *cinctulus*.  
 Abdomen rufous; wings violaceous.....33. *tardus*.  
 Abdomen black:  
 Venter white.....26. *pectoralis*.  
 Venter black:  
 Pectus rufous.....27. *rufopectus*.  
 Legs rufous, apex of posterior femora black.....28. *rufipes*.  
 Legs rufous, posterior femora black.....29. *concessus*.  
 Legs black and white, posterior tibiæ black; wings  
 clear.....30. *flavomarginis*.  
 Legs black and white, posterior tibiæ banded;  
 wings clear.....31. *cinctitibiis*.  
 Legs black and white, posterior legs black; wings  
 obscure.....32. *fumipennis*.  
 Legs black and white, posterior legs black; wings  
 violaceous.....33. *atroviolaceus*.  
 B.—Body short:  
 Pale spots on venter; thorax black; abdomen rufous.....35. *semiluteus*.  
 Abdomen with black dots.....37. *punctatus*.  
 Abdomen banded with rufous.....36. *confusus*.  
 C.—Species not determined.....38. *nigrofasciatus*.  
 39. *subceruleus*.

## A.

**T. grandis.**

*Allantus grandis*, Norton, Bost. Jour. vii, 1860, 239. 7. ♂ ♀.

*Tenthredo grandis*, Norton, Bost. Proc. ix. 121.

Black; the tips of antennæ, collar, scutel and sides of basal membrane yellow. Length 0.40—.50. Br. wings 1.00—1.12 inch.

♀.—Bluish-black, body very long, abdomen compressed, widest beyond middle, at apex acute; the four apical joints of antennæ yellow; head polished, a spot on each side of clypeus, sometimes joined, disk of labrum, base of mandibles, edge of collar, scutel and sides of basal membrane, straw-yellow; legs black, a white line down the anterior pair below middle of femora, a spot on intermediate tibiæ below, their tarsi and the last tarsal joint of posterior pair whitish; inner anterior tibial spur deeply and widely bifid, the outer limb not branched; inner claw tooth large; wings sub-violaceous; under pair mostly hyaline.

♂.—The male has more of the collar, an oval dot above the anterior coxæ, a line on intermediate femora and spot at end of posterior tibiæ before, white.

Canada, Connecticut, Illinois. Not common.

**2. T. mellinus.**

*Allantus mellinus*, Harris, MS.

[Norton, Bost. Jour. vii, 1860, 24. ♀ ♂.

*Tenthredo mellinus*, Norton, Bost. Proc. ix. 121.

Reddish-yellow; antennæ mostly pale, mouth and a spot above posterior coxæ straw color. Length 0.44—.47. Br. wings 0.86—.90 inch.

♀.—Reddish or honey-yellow; body long; antennæ color of body, not very long; mouth below antennæ and cheeks, a spot above posterior coxæ, and anterior coxæ and femora, straw color; wings hyaline.

♂.—The male has a black spot about ocelli, the tegulæ, collar, V-spot, scutel, pleura, pectus and coxæ pale yellow; a line on posterior coxæ and half of their femora above, black.

Maine. (Harris Coll.)

Var. *a* ♀.—Tegulæ and sides of basal membrane pale yellow, a spot on each lobe of mesothorax and the apical half of femora black; wings smoky-yellowish. Norway, Maine, (Cambr. Mus.)

Another specimen has the scutel yellow and the four posterior coxæ black. Labrador. (A. S. Packard Jr.).

Var. *b*. ♀.—Tegulæ and edge of collar waxen, remainder of thorax and abdomen of one color; neck and sutures of pleura blackish; legs of one color; anterior pair pale before. Chilingunck Depot, Washington Territory. (Smiths. Inst.)

3. *T. xanthus*.

*Tenthredo xanthus*, Norton, Proc. Ent. Soc. Phila. III. 1864, 13. 26. ♀.

Honey-yellow; base of antennæ, mouth, edge of collar and spot above posterior legs white; neck and spot on pectus black. Length 0.52. Br. wings 0.92 inch.

♀.—Color honey-yellow; abdomen very long. Antennæ not reaching beyond first segment of abdomen, color black, the two basal joints and part of third beneath yellowish; head large; an indistinct line on inner orbits and a dot above each antenna, face below, tegulæ in part, collar with a connected dot beneath, sides of basal plates and spot above posterior coxæ, white or straw color; the prothorax, front of anterior lobe, a spot at base of side lobes of mesothorax, pectus, a narrow line in the joints of the first second, third and fifth segments of tergum and part of the apex beneath, black; legs the color of body, their anterior coxæ and the two anterior pair before, pale; anterior inner spur two-thirds the length of first tarsal joint, widely bifid; hinder legs long and stout, wings smoky yellowish, nervures black, costa and basal nervures rufous, base of stigma pale.

Var. *a*. A triangular white spot on pleura.

Var. *b*. The antennæ whitish beneath.

Pike's Peak, Colorado. (Coll. Am. Ent. Soc.)

Many specimens. The number and size of the black spots on the abdomen varies.

4. *Tenthredo ruficolor*, n. sp.

Black; base of antennæ, head, thorax above, and apex of abdomen yellow-red. Length 0.52. Br. wings 0.96 inch.

♀.—Body long. Antennæ moderate, black, the two basal joints yellow; head large; the head, tegulæ, thorax above, edges of basal plates and apical half of abdomen rufous or honey-yellow; a faint pale dot at summit of inner orbits, face below antennæ, collar, sides of basal plates and a spot beneath straw-yellow; back of head, a large spot on side lobes of mesothorax, pleura, pectus and three basal segments of abdomen black; legs rufous; coxæ, a line on basal half of intermediate femora above and on apex of posterior tibiæ black; anterior tibiæ above, pale; wings smoky, base of stigma and the costa pale, nervures darker.

Canada. (Coll. Am. Ent. Soc.) 2 ♀.

5. *T. verticalis*.

*Tenthredo verticalis*, Say, Longs. 2nd. Exp. II. 1824, 317. 2. ♀

Norton, Bost. Proc. ix. 1862, 121.

*Allantus verticalis*, Norton, Bost. Jour. vii. 1860, 250. 28. ♀ ♂.

Black; part of head, tegulæ, collar, V-spot, scutel, basal plates and bands on abdomen yellow. Length 0.40—48. Br. wings 0.82—.88 inch.

♀.—Black, abdomen long and flattened; antennæ black, a spot on

the basal joint within, sometimes also on second and third joints, yellow; head mostly yellow, a large spot, trilobed below, on vertex from antennæ to summit, a smaller irregular orbital spot above and outside of each eye and the back of head, black; tegulæ, collar, V-spot, scutel and behind, ridges of metathorax, basal plates and a dot above posterior coxæ pale yellow; abdomen reddish-yellow, with a large divided spot on the first, second and third segments above and the three apical segments, black; legs same color, base of coxæ, apical half of posterior femora and tips of tibiæ black; wings faintly smoky, nervures brownish.

The male has the cheeks entirely yellow, pleura yellow, breast waxen. tergum rufous yellow, except some black spots at base; basal plates mostly black, legs of one color, except a dot on posterior coxæ and a line down the four posterior femora above.

Var. *a*. The spot on outer orbit entirely wanting. Pennsylvania.

Var. *b*. A yellow spot and dot beneath, on the pleura, below the anterior tegulæ. Connecticut.

New England, New York, New Jersey, Pennsylvania, North West Territory.

#### 6. *T. lobatus*.

*Allantus lobatus*, Norton, Bost. Jour. vii. 1860, 253, 32. ♀.

*Tenthredo lobatus*, Norton, Bost. Proc. ix. 121.

Black; most part of head, tegulæ, two edges of anterior angle and V-spot pale yellow. Length 0.48—50. Br. wings 0.90 inch.

♀.—Color black, abdomen long and flattened, antennæ long, a white spot on inside of basal joint; head yellow, black behind, with a spot on vertex, trilobed below, extending from antennæ to summit, touching the eyes above and extending a narrow line half down their orbits; tegulæ, two edges of anterior angle, V-spot, four slender lines on ridges of metathorax, sides of basal plates and a small dot below, pale yellow; legs pale yellow, coxæ black, except at tip; a slender black line on anterior femora and tibiæ above and on intermediate femora and tibiæ; posterior femora, tips of tibiæ and tarsi above black; wings faintly smoky.

Var. *a*.—♀. A black spot near base of mandibles, two dots behind ocelli, spot below tegulæ, four lines at V-spot, apex of scutel and two dots before, pale yellow; a black line down anterior tibiæ.

Farmington, Connecticut. Not common.

#### 7. *T. angulifera*.

*Allantus angulifer*, Norton, Bost. Jour. vii, 1860, 252, 31. ♂

*Tenthredo angulifer*, Norton, Bost. Proc. ix. 121.

Black; most part of head, tegulæ, collar, two or four lines on thorax, angulate spot on pleura and venter pale yellow. Length 0.47. Br. wings 0.90 in.

♀.—Black; antennæ long; head mostly yellow, black behind, a large black spot on the vertex, trilobed below, extending from antennæ to occiput, broadly touching the summit of the eyes and not extending down without, black; tegulæ, most of collar, V-spot, a spot before scutel, upper and lower edges of basal plates, and a spot beneath their sides, a spot on pleura connecting base of wings, a large angulate mark below, a spot on pectus and basal two-thirds of venter, pale yellow; legs whitish, posterior coxæ, except at tip, a slender line on four anterior legs above, apical half of posterior femora, their tibiæ at tip and tarsi black; wings hyaline.

♂.—The male has the whole body beneath greenish waxen-yellow, the angulate spot on pleura enlarged and indistinctly reddish-yellow spots at junction of segments of tergum; hinder tarsi black.

New England; New York.

This is closely allied to *T. ventralis*, if it is not the same.

#### 8. *T. ventralis*.

*Allantus ventralis*, Say, West. Quart. Rep. II. 1823, 72. 1.

Norton, Bost. Jour. vii. 253, 33.

*Tenthredo ventralis*, Norton, Bost. Proc. ix. 121.

"Black, feet before and abdomen beneath white. Length nine-twentieths of an inch.

"Body black; nasus, labrum, mouth, abbreviated line above the eye and large spot beneath it, white; thorax with a line before the wing and small spot each side on the scutel, white; wings a little dusky; feet white before; pectus with a white line on each side and somewhat testaceous central spot; tergum immaculate; venter white.

"Inhabits Arkansa."

#### 9. *T. angulatus*.

*Tenthredo angulatus*, Norton, Proc. Ent. Soc. Phil. III. 1864, 13. 27. ♂.

Black; orbits and mouth, collar, V-spot, angular line and spot on pleura and the breast white, apical half of abdomen rufous. Length 0.32. Br. wings 0.70 in.

♂.—Black; antennæ long, third joint a little longer than fourth; an orbital line, interrupted at summit and diverging from outer side of eye above, face below antennæ, collar, V-spot, a large slender angular line on pleura, a spot above posterior coxæ and the breast, straw-white; abdomen rufous, the two basal segments and sides of the third black above, paler at base beneath; coxæ black above, the four anterior legs white, black above; posterior legs black, their trochanters white and femora whitish in the middle; wings hyaline, nervures blackish.

Massachusetts. (Coll. Am. Ent. Soc.)

10. *T. formosus*.

*Tenthredo formosus*, Norton, Proc. Ent. Soc. Phil. III, 1864, 14, 28.

Black; inner orbital lines, face below antennæ, cheeks, collar, spot on sides of scutellum, on pleura and venter white; apex of tergum and posterior femora rufous. Length 0.50. Br. wings 0.98 in.

♀.—Body very long; antennæ moderate, third joint one half longer than fourth; a line from near the occiput, interrupted half down the inner orbit on each side, face around and beneath antennæ, cheeks, tegulæ, collar, spot on each side of scutellum, with an outer side spot, three dots beneath on each side of postscutellum, edge of basal plates, a large spot on pleura, with one before and two behind it, and the venter, except at tip, white; the five apical segments of tergum and apex of venter rufous; the coxæ, trochanters, most part of anterior legs, of middle femora and basal third of posterior femora, white; intermediate tibiæ and tarsi and most part of posterior femora and tibiæ, rufous; a slender black line down the two anterior pair of legs, the base of posterior femora above, the apex of tibiæ and their tarsi, black; apical half of wings somewhat clouded, nervures blackish; stigma at tip black, its base and the costa pale rufous.

♂.—The male has most of the tergum rufous and the breast and coxæ of a waxen color.

Maine, Massachusetts.

11. *Tenthredo eximius*, n. sp.

Black; inner orbital spots, mouth, tegulæ, collar, angular mark and spot on pleura, white; apical half of abdomen red. Length 0.48. Br. wings 0.94 inch.

♀.—Black, abdomen not very long; antennæ moderate, slender; a short inner orbital line, face about and beneath antennæ, tegulæ, collar, a wide angular spot on pleura, a spot before and another behind and basal half of venter, white; the four basal segments of tergum black; remainder of abdomen rufous; legs whitish, becoming rufous towards the tarsi; a short line on anterior femora at tip, and on base of their tibiæ above, a line down the medial femora and tibiæ and most part of posterior femora and tibiæ black, with a whitish line beneath; wings hyaline, clouded toward apex.

♂.—The male has the inner orbital line extending to summit of eye; the pectus and all the legs are waxen white; a black line down all the legs above.

Summit of Mt. Washington, New Hampshire (Baron Osten Sacken); Maine (A. S. Packard, Jr.).

12. *T. dissimilis*.

*Allantus dissimilis*, Norton, Bost. Jour. vii. 1860, 250, 29.

*Tenthredo dissimilis*, Norton, Bost. Proc. ix. 121.

Black; orbital lines, and six lines before scutellum, yellow; apex of abdomen rufous. Length 0.45. Br. wings 0.90 inch.

♀.—Black; body long; antennæ quite long; face below antennæ, a short orbital line on each side of ocelli, two dots behind ocelli, an angulate line (not touching eyes) from cheeks to sutures of occiput, tegular, six lines, viz. four on mesothorax before and two from scutellum to anterior tegulæ, a dot before scutellum, lines on the ridges of metathorax, the upper and lower edges of basal plates, an oval spot above posterior coxæ and the basal half of venter, straw-yellow; apical half of abdomen rufous; legs yellowish; all the coxæ, the four anterior femora, except at tip and base, posterior femora and a slender line down the posterior tibiæ above, black; four posterior tibiæ reddish; wings yellow-hyaline, base of stigma and costal edge pale.

Northern Illinois. One ♀.

### 13. *T. signatus*.

*Allantus signatus*, Norton, Bost. Jour. vii. 1860, 246, 23.

*Tenthredo signatus*, Norton, Bost. Proc. ix. 121.

Black; mouth, cheeks, tegulæ, collar, pleural line, spot on pectus and coxæ, white; abdomen and hinder legs, rufous. Length 0.44. Br. wings 0.88 inch.

♂.—Color black; antennæ moderate, flagellum generally whitish beneath toward apex; mouth, cheeks, a minute dot at summit of eyes within, tegulæ, collar, a spot above anterior and posterior coxæ, a longitudinal line or large spot on pleura, with a perpendicular line behind, a large spot on breast before intermediate legs, edges and sides of basal plates, straw color; abdomen rufous, darkest on basal segments above; coxæ, trochanters and anterior legs before, white; a line down the four anterior femora and sometimes the upper half of tibiæ above, on the posterior coxæ, trochanters and base and tip of femora above and the tips of posterior tibiæ and tarsi black; remainder of legs rufous; wings smoky-hyaline, stigma at base pale.

♀.—The female has the tips of antennæ rufous beneath, more of black upon abdomen.

Var. ♀.—Flagellum beneath black, basal joints of antennæ ferruginous, no dot above eyes, spot on breast small; legs more yellow than rufous, less of black on coxæ.

Var. ♂.—Antennæ wholly black, apex of abdomen black, no dots above eyes.

Canada, Maine.

### 14. *T. variatus*.

*Tenthredo variatus*, Norton, Proc. Ent. Soc. Phil. iii. 1864, 12, 25, ♀.

Black; mouth, cheeks, collar, tegulæ, line and spots on pleura and pectus, white; abdomen rufous. Length 0.46—.48. Br. wings 0.86—.92 inch.

♀.—Black; antennæ moderate, joints somewhat globose, labrum pointed; a minute dot at summit of eyes within, an oval dot above base of each of antennæ, face below, cheeks, tegulæ, collar, a round connected dot below, a longitudinal line on pleura, a spot above the anterior and posterior coxæ; a spot on breast before intermediate legs, and sides of basal plates, white; abdomen rufous, with first second and third segments above and beneath and the apex beneath black; all the coxæ (except a black spot above) trochanters, anterior legs before and all the patellæ, white; anterior legs above and both the posterior pair partly rufous, with a slender black line down all the femora and the four anterior tibiæ; apical half of wings smoky, nervures black, stigma pale at base, costa rufous.

♂.—The male has the labrum not pointed but rounded before, a slender white orbital line on the inner half of orbit, all of pleura except a prolonged triangle beneath the wings and the breast, white; femora whitish beneath.

Rocky Mountains, Colorado. (Coll. Am. Ent. Soc.) 1 ♂, 1 ♀.

#### 15. *T. pleuralis*.

*Tenthredo pleuralis*, Cresson, Proc. Ent. Soc. Phil. iv. 1865, 245, 7.

“Black; mouth, cheeks, margins of anterior angle, body beneath and most of the legs, white; apical half of abdomen ferruginous. Length, ♀, 5½ lines; ♂, 4½ lines. Br. wings, ♀, 11 lines; ♂, 9½ lines.

♀.—Black; antennæ moderate, a small dot near summit of eyes within, a dot above base of each of antennæ, face below, lower half of cheeks, tegulæ, upper and lower margins of anterior angle, a broad mark on pleura, most of breast, four posterior coxæ and sides of basal plates, white; basal half of tergum black, apical half ferruginous; venter white, reddish toward tip; legs whitish; femora and tibiæ behind, especially at tips, black; tarsi ochreous; wings pale yellowish-hyaline, nervures blackish yellowish at base as well as the costa and base of stigma.

♂.—The male has the antennæ a little longer; pleura entirely white; base of abdomen blackish, remaining segments honey-yellow; apical ventral segments tinged with same color; wings faintly yellowish.

Colorado. (Coll. Am. Ent. Soc.). Great Slave Lake, (Smiths. Inst. R. Kennicott.) 1 ♂, 1 ♀.

#### 16. *T. variegatus*.

*Tenthredo variegatus*, Norton, Proc. Ent. Soc. Phil. iii. 1864, 12, 24, ♂.

Black; face, collar, tegulæ, pleura, pectus and legs beneath, white; apical half of abdomen rufous. Length 0.36. Br. wings 0.76. inch

♂.—Black; antennæ not reaching beyond second segment of



men; an oval dot above base of each of antennæ, a short line at the summit of inner orbits, cheeks, face below antennæ, tegulæ, collar, a longitudinal mark on pleura, a large spot on breast before intermediate legs, a spot above posterior coxæ, and all the legs beneath, including the coxæ, white; abdomen mostly yellow-rufous; the first and half of second and of third segments of tergum black, and the venter toward its base whitish; legs black above (except apex of coxæ), tarsi all black, their patellæ white; apical half of wings clouded, nervures black, basal half of stigma white; second submarginal cell long and rather narrow, third submarginal not longer than the width of its outer end; second recurrent nervure received very near junction of second and third submarginal cells.

Rocky Mountains, Colorado. (Coll. Am. Ent. Soc.) One ♂.

17. *T. rufopedibus*.

*Tenthredo rufopedibus*, Norton, Proc. Ent. Soc. Phil. iii, 1864, 15, 30.

Black; mouth, cheeks, collar, tegulæ, spot on pleura and pectus, white; middle of abdomen rufous. Length 0.44. Br. wings 0.92 inch.

♂.—Black; antennæ long, slender, joints enlarged at tips; a minute oval dot at base of each of antennæ, face and cheeks beneath, tegulæ, collar, a wide angulate L on pleura and spots above anterior and posterior coxæ, white; breast waxen-white; abdomen rufous on the second, third and part of fifth segments above, and all but the two apical segments beneath; legs mostly rufous; the four anterior coxæ waxen; a spot on the tips of the anterior femora above and the apical half of posterior tibiæ and their tarsi black, except end of apical joint, which is rufous; ends of intermediate joints blackish; wings large, hyaline.

Pennsylvania, Illinois (Coll. Am. Ent. Soc.)

Two ♂. The color of the legs is honey-yellow like *T. rufipes*.

18. *Tenthredo varipictus*, n. sp.

Black; mouth, cheeks, tegulæ, collar, line on pleura, venter and coxæ straw white; apical half of abdomen rufous. Length 0.44. Br. wings 0.88 inch.

♀.—Black; antennæ hardly reaching beyond base of abdomen, slender; face and cheeks below antennæ, tegulæ, upper and lower margins of anterior angle, a large obtusely sub-angulate stripe on pleura and spot above posterior coxæ straw-white, venter waxen; the four basal segments of abdomen black, remainder rufous; coxæ, and four anterior legs beneath waxen; intermediate tibiæ and tarsi and posterior legs reddish; a black stripe down all the legs above; tarsi tipped with black; wings hyaline, faintly smoky, nervures black.

Cape Mendocino, California. (Cambr. Mus. Coll. by A. Agassiz, Jr.) One Female.

19. *Tenthredo varians*, n. sp.

Black; mouth, cheeks, a spot above posterior coxæ and on pectus, white; a band on abdomen and the femora rufous. Length 0.44. Br. wings 0.84 inch.

♂.—Black; antennæ moderate; mouth, a spot on cheeks, edges of tegulæ and collar, a spot above posterior coxæ and on the breast, white; the second, third and fourth segments of tergum and five basal segments of venter rufous; legs rufous, the anterior coxæ and all the trochanters whitish; apical half of posterior tibiæ and their tarsi black; wings hyaline, nervures black.

Canada. (Coll. Am. Ent. Soc.) One male.

20. *T. semirufus*.

*Tenthredo semirufus*, Norton, Proc. Ent. Soc. Phil. III, 1864, 12, 23. ♀.

Black; mouth, cheeks and collar, white; apical half of abdomen rufous; wings hyaline. Length 0.46. Br. wings 0.92 inch.

♀.—Black; antennæ not reaching beyond third segment of abdomen; joints swelled at tips, the third one half longer than fourth; labrum rounded; clypeus, labrum, base of mandibles, collar, and a dot above posterior coxæ white; a spot on the third segment above and the five apical segments of abdomen rufous; legs black, with the anterior pair below the coxæ white beneath; the femora of medial pair and the tibiæ and tarsi of hinder pair reddish, paler on the tarsi; apical joints of all the tarsi pale; hinder spurs long, blunt, wings slightly clouded, nervures, stigma and costa blackish.

Var. *a*. ♀.—Collar, and fourth segment of abdomen black; posterior femora rufous before and also the basal half of their tibiæ rufous above; costa in both pair of wings and some of the basal nerves reddish.

Rocky Mountains, Colorado. (Coll. Am. Ent. Soc.) Two specimens.

21. *Tenthredo discrepans*, n. sp.

Black; mouth, spot on cheeks, tegulæ, collar, spot above coxæ and on pectus white, abdomen banded with rufous. Length 0.48. Br. wings 0.96 inch.

♂.—Black, (antennæ wanting), the nasus, labrum, base of mandibles, palpi, an oval spot on cheeks touching eyes, tegulæ, collar, dot above posterior coxæ and spot on breast, yellow-white; the first, second and third segments of tergum and four basal segments of venter rufous; legs black; all the coxæ beneath, the anterior legs before and most of medial pair before, yellow-white; wings smoky hyaline, stigma and costa black.

English River, H. B. T. (Smiths. Inst.) One male.

22. *T. tricolor*.*Allantus tricolor*, Harris, MS.

Norton, Bost. Jour. vii. 1860, 247, 22. ♀.

*Tenthredo tricolor*, Norton, Bost. Proc. ix. 121.

Black; mouth, sides of basal plates and spot below, white; apex of abdomen rufous. Length 0.48. Br. wings 0.95 inch.

♀.—Black; antennæ long and slender; the two basal joints rufous within; mouth, sides of basal plates and a round dot above posterior coxæ straw-white; the four basal segments of abdomen black; remaining segments above and beneath rufous; the coxæ, base of anterior femora, four posterior femora, posterior tibiæ and first joint of tarsi black, (the two latter with a rufous tinge); remainder of legs rufous; wings hyaline, basal half of stigma pale.

Maine. (Harris Coll.) One specimen.

23. *Tenthredo mutans*, n. sp.

Black; mouth, cheeks and four anterior legs beneath yellow; abdomen and hinder femora rufous. Length 0.44. Br. wings 0.84 inch.

♂.—Black; antennæ moderate; mouth, cheeks, a spot above posterior coxæ and the four anterior coxæ and legs straw-white; abdomen rufous, except the two basal segments; posterior femora rufous; a line down the four anterior legs and the posterior tibiæ and tarsi black; wings hyaline, faintly clouded.

Canada. (Coll. Am. Ent. Soc.) One ♂.

This is allied to *T. Signatus*.

24. *T. semirubra*.*Tenthredo semirubra*, Norton, Proc. Ent. Soc. Phil. III. 1864, 14. 29. ♀.

Black; mouth white; apical half of abdomen rufous. Length 0.54. Br. wings 0.98 inch.

♀.—Black; antennæ moderate, slender, joints enlarged at tips, slightly flattened beyond the middle; labrum rounded before; parts of mouth pale yellow; the two basal segments of abdomen black, remainder rufous; abdomen lengthened; legs black; the anterior tibiæ before, all the spurs, and tarsi of the two anterior pair and apex of last joint of posterior tarsi, piceous; wings faintly yellowish.

♂.—The intermediate as well as anterior femora and apex of tibiæ before, white.

25. *T. piceocinctus*.*Allantus piceocinctus*, Norton, Bost. Jour. vii. 1860, 249. 26. ♀.*Tenthredo piceocinctus*, Norton, Bost. Proc. ix. 120.

Black; antennæ piceous beneath, scutellum white, a piceous band on abdomen. Length 0.52. Br. wings 0.85 inch.

♀.—Dull black, abdomen very long, antennæ long; third joint but little longer than fourth; color piceous beneath, the first and second

joints piceous at base only; clypeus but slightly emarginate, labrum rounded; parts of mouth piceous, the clypeus sprinkled with black; scutellum white; the second, third, fourth and fifth segments of abdomen piceous; legs piceous; all the coxæ and the four posterior femora black; posterior tibiæ and tarsi dark above; wings slightly smoky, nervures black; basal half of stigma white.

Brooklyn, N. Y. (J. Akhurst.)

The wings are quite in proportion to the length of body.

**26. *T. pectoralis*.**

*Tenthredo pectoralis*, Norton, Proc. Ent. Soc. Phil. III. 1864, 11. 22. ♀.

Black; the mouth, cheeks, tegulæ, collar, pleura and body beneath, white. Length 0.36. Br. wings 0.72 inch.

♂.—Black; antennæ not longer than to first segment of abdomen; third joint one half longer than fourth; labrum rounded; face below antennæ, cheeks, an oval dot above base of each of antennæ; tegulæ, collar, pleura and the whole of body beneath, white; upper edge of pleura and a large semicircular line on pectus black; legs black above and white beneath, coxæ mostly white; wings faintly clouded on the apical half, nervures blackish.

Rocky Mountains, Colorado. (Coll. Am. Ent. Soc.)

The antennæ resemble those of *Macrophya*.

**27. *T. rufopectus*.**

*Allantus rufopectus*, Norton, Bost. Jour. vii. 1860, 258. 38. ♀ ♂.

*Tenthredo rufopectus*, Norton, Bost. proc. ix. 1862, 121.

Black, antennæ in part, pectus and legs rufous. Length 0.40—42. Br. wings 0.85.—90 inch.

♀.—Black, body not very stout; antennæ long and slender; color ferruginous, tips of joints above black, sometimes also the two basal joints; labrum rounded; labrum, base of mandibles and palpi, tegulæ, collar, and four radiating lines on ridges of metathorax, yellow; a white spot above base of posterior coxæ; pectus and legs orange-red; the four anterior tibiæ and tarsi and the medial femora tipped with black; apex of posterior femora, apical half of tibiæ and their tarsi black; wings hyaline, basal edge of stigma and the costa pale.

♂.—The male has a yellow spot on each side of the disk of clypeus and on the pleura over each of the four hinder coxæ; the first and second segments of abdomen and the basal segments of venter sometimes indistinctly rufous.

New England, New York, Pennsylvania, Illinois.

A specimen from Illinois has the venter white beneath.

**28. *T. rufipes*.**

*Tenthredo rufipes*, Say, Long's 2nd. Exp. II. 1824, 317. 3. ♀.

Norton, Bost. Proc. ix. 1862, 121.

*Allantus rufipes*, Norton, Bost. Jour. vii. 1860, 255. 37.

*Allantus leucostoma*, Kirby, Faun. Bor. Am. 1837, 256. 354.

♂ Black, mouth yellow, legs rufous, apical half of hinder tibiæ and the tarsi black. Length 0.48.—52. Br. wings 0.96.—1.00 inch.

♀.—Black, body long, not very stout; antennæ reaching to about the second segment of abdomen, slender, slightly flattened beyond the middle; third joint longer than fourth, all the joints enlarged at tips; color rufescent, darkest toward base; nasus, labrum, mandibles and a spot above posterior coxæ straw color, tegulæ ferruginous or yellow, coxæ and all the legs orange-red, apical half of posterior tibiæ and their tarsi black; wings hyaline, very faintly smoky, stigma dark, marginal cross-nervure bent.

North West Territory. (Say) Maine, Massachusetts; Canada.

Var. *a*. ♀.—The lower half of cheeks rufous. Maine.

Var. *b*. ♀.—Collar yellow. Illinois.

Var. *c*. ♀.—Collar, lower half of cheeks and a dot on pleura yellow. Labrador.

A specimen from Massachusetts has the legs ochre-yellow, agreeing with Kirby's *Allantus leucostoma*.

This seems to be the same with *Tenthredo rufipes*, Ziegler. Europe, Le Pel. Mon. Tenth. 81. 239.

29. *Tenthredo concessus*, n. sp.

Black; mouth and spots over hinder coxæ yellow; tibiæ and tarsi rufous. Length 0.48. Br. wings 0.96 inch.

♀.—Black; antennæ moderate; third joint nearly twice as long as fourth; labrum pointed; nasus, mouth beneath, spot on sides of basal plates and spot above posterior coxæ, yellow; legs black, with the apex of four anterior femora, the four anterior and basal half of posterior tibiæ, spurs and all the tarsi yellow-red; wings yellowish-hyaline, stigma piceous, basal half pale.

Good Hope, Mackenzie River, H. B. T. (R. Kennicott.)

30. *T. flavomarginis*.

*Allantus flavomarginis*, Norton, Bost. Jour. vii. 1860, 254. 55. ♀.

*Tenthredo flavomarginis*, Norton, Bost. Proc. ix. 121. -

Black; mouth, cheeks, tegulæ, collar and sides of basal plates yellow. Length 0.50. Br. wings 1.00 inch.

♀.—Black, abdomen long and not stout; antennæ long, third joint longer than fourth; edge of nasus black; nasus and mouth below, spot on cheeks, tegulæ, two edges of collar, sides of basal plates and spot beneath, straw-white; legs black; most part of anterior pair and the medial tibiæ at tip and apical tarsi whitish; wings hyaline, clouded toward apex, stigma mostly black.

Farmington, Connecticut.

One female. Another specimen, from the Notch, White Mountains, has the antennæ shorter and the medial tibiæ whitish before.

31. *Tenthredo cinetibiis*, n. sp.

Black; the mouth, edge of collar, two spots above hinder coxæ, a band on all the tibiæ and tarsi yellow. Length 0.53. Br. wings 1.00 inch.

♀.—Body long and rather stout; antennæ moderate; the joints suddenly dilated at tips; head and thorax dull with dense fine punctures, which are coarser, and confluent on the head; clypeus moderately notched, and with the mouth beneath, a broad mark on collar (tegulæ black) and two spots above hinder coxæ, straw-white; legs black; a slender line on the four anterior femora above, and all the tibiæ except the tips yellow, (the anterior tibiæ before, whitish to apex): anterior tarsi and apical joints of the four others reddish-yellow, wings ample, yellowish-hyaline; nervures blackish, base of stigma and all of costa and costal space reddish.

Caribou Island, Straits of Belle Isle. (A. S. Packard, Jr.)

This is much like *T. flavomarginis*, but differs in its banded tibiæ.

32. *Tenthredo fumipennis*, n. sp.

Black; mouth and anterior legs before, white; wings fuliginous. Length 0.38. Br. wings 0.78 inch.

♂.—Body black; antennæ stout, not long, joints enlarged; abdomen stout, rounded at end as in *Selandria*; nasus, except in middle, mouth beneath, tips of anterior coxæ, anterior femora and tibiæ before and a line down the medial femora before, white; wings fuliginous, apical half darkest, nervures blackish.

Cape Mendocino, California. (Cambr. Mus. Coll. by A. Agassiz, Jr.)

One male. The lanceolate cell of one wing has a second straight cross line, that on the other wing has four.

33. *T. atrovioleaceus*.

*Allantus atrovioleaceus*, Harris, Cat.

Norton, Bost. Jour. vii. 1860, 255. 36. ♀ ♂.

*Tenthredo atrovioleaceus*, Norton, Bost. Proc. ix. 120.

Black; a white spot on posterior coxæ; wings sub-opaque, violaceous. Length 0.45—50. Br. wings 1.00—1.10 inch.

♀.—Black; body large, abdomen long, quite stout, flattened; antennæ long, stout and compressed; head, thorax and legs dull with large punctures; labrum almost conical; posterior legs long; a white spot on base of posterior coxæ above; anterior tibiæ and tarsi and apical joints of all the tarsi piceous; wings large, sub-opaque, violaceous, with irregular whitish lines along the apical nervures.

♂.—The antennæ of the male are sometimes dark piceous; the abdomen is stout, rounded at apex and the under wings without middle cells; their outer cells complete viz. with an outer nervure near the margin, as in *T. ambigua* of Europe, but the outer nervure of the submarginal is partly wanting. The wing is formed as in *Perineura*.

Canada, Maine, Massachusetts, Connecticut, Pennsylvania, Maryland.

The abdomen is of nearly equal width from base to beyond the middle.

Var. *CINCTULUS*.

♀. Abdomen black, with a rufous band on the third, fourth and fifth segments. Massachusetts. Two ♀.

Var. *TARDUS*.

♀ ♂.—Resembles, *T. atrovioleaceus* in form and marks, except that the abdomen is rufous or honey-yellow. The males have no inner under-wing cells; outer cells as above. New England; Illinois.

34. *Tenthredo attractus*, n. sp.

Black; mouth and apex of abdomen rufous; wings clouded violaceous. Length 0.56. Br. wings 1.10 inch.

♀.—Black; body very large and stout; antennæ moderate, not greatly flattened, third joint long; head as wide as thorax, large; nasus emarginate and with the labrum, base of mandibles and palpi, waxen-yellow; thorax closely punctured; punctures on the pleura not coarse; the five apical segments of abdomen ferruginous, abdomen long, widened beyond middle; legs black; the anterior tibiæ and tarsi pale before; wings clouded violaceous, the apical third least obscure, stigma and costa black, base of stigma pale.

English River. (Smiths. Inst.)

One female. This large species resembles *T. atrovioleaceus* var. *tardus* in form, but the wings are less obscure, the mouth is pale and the abdomen is more slender and the punctures on head and pleura much finer.

35. *T. semiluteus*.

*Tenthredo semiluteus*, Norton, Bost. Proc. ix. 1862, 121. ♀ ♂.

Greenish-white and rufous, with the vertex and thorax above, black. Length 0.24—30. Br. wings 0.50—65 inch.

♀.—Body not very long or large, antennæ two-thirds the length of body, slender, luteous, the two basal joints and a narrow line above, black; head greenish-white; a large black spot on vertex extending down between antennæ; clypeus somewhat rounded before; mouth white; apical joints of palpi black; thorax black; tegulæ, all the edges of anterior angle, a spot on each side lobe of mesothorax, scutel. pleura and pectus pale yellow; an irregular spot on pleura, and the disk of basal plates, black; abdomen and legs honey-yellow; coxæ and base of femora, white; posterior femora blackish above; inner spur of anterior tibiæ obtuse, widely bifid; inner claw tooth larger than outer; wings hyaline; apical half of stigma and the costa luteous; marginal cross nervure bent and received in middle of third submarginal cell; underwings without middle cell. (One specimen with one inner cell in one underwing).

♂.—The male has the antennæ reddish-yellow; a black spot on upper side of two basal joints; apical segment of abdomen darkest; abdomen slender, legs of one color, under-wings as in *T. atrovioleceus*.

Connecticut, Pennsylvania.

36. *Tenthredo confusus*, n. sp.

Black; antennæ partly red-yellow, a rufous band on abdomen. Length 0.28. Br. wings 0.64 inch.

♂.—Black; body not stout; antennæ long and slender, about two-thirds the length of body, setaceous, joints not enlarged at tips, third and fourth joints equal, flattened; color piceous; the four apical joints whitish; head black, nasus emarginate, piceous, labrum white, scutellum and mesothorax ferruginous, with vittæ on the side lobes; abdomen rufous, the two apical segments black; coxæ, except at tips, apex of hinder femora and tibiæ, black; tarsi white, remainder of legs ferruginous; inner anterior spur long, of equal size throughout, obtuse, not widely bifid; inner claw tooth not so large as outer; wings yellow-hyaline, base of stigma white; under wings without middle cell, outer cells incomplete, (as usual.)

United States. (Smiths. Inst.)

37. *T. 14-punctatus*.

*Tenthredo 14-punctatus*, Norton, Proc. Ent. Soc. Phil. I. 1862, 143, ♀ ♂.

Greenish-white, thorax black, tergum rufous, with seven black dots on each side. Length 0.34. Br. wings 0.68 inch.

♀ ♂. Body rather long, abdomen not flattened, antennæ long and slender, whitish, the upper side black, third joint a little longer than fourth; nasus not emarginate, a trilobed black spot on vertex; a spot on each lobe of mesothorax and sutures of metathorax, black; scutellum pale; thorax white beneath; abdomen tinged with rufous; seven black spots on each side of tergum; legs pale, the upper side black, except on the coxæ, base of femora and an interruption near the base of tibiæ; claws apparently bifid, the two teeth close together; wings hyaline, stigma and costa pale, underwings without middle cells, outer cells incomplete, but the lanceolate and second brachial cells reaching the margin, an incomplete nervure springing from their upper tips.

Virginia. (Coll. Am. Ent. Soc.) 1 ♀. 1 ♂.

*Uncertain species.*

38. *T. nigro-fasciata*,

*Tenthredo nigro-fasciata*, Esch. Entomog. Berlin, 1822, 96. 64.

"Black; body beneath, with spot upon the head and thorax, and the scutellum yellow; the vertex and fasciæ upon the abdomen black, stigma brown. Isle of Unatashka, Russ. Am. Length 4 lines.

"This belongs to the division of Tenthredinidæ, of which the hin-



der thighs extend over the abdomen and it approaches closely to *T. vaga*, Fab. Head of a clear yellow, with a great black spot upon the vertex, with its hinder border black. Eyes grey, antennæ longer than the moiety of body, setaceous, black; first article white beneath. Corselet having before two longitudinal yellow marks, and the anterior border forming a collar of the same color. Scutellum yellow, dorsal granulation brown. Pectus of a clear yellow with a black spot upon the sides. Abdomen short, wide, black and shining above; the dorsal segments bordered narrowly behind on the sides with clear yellow; their base, from the middle black. Wings a little longer than the abdomen, transparent, at the nervures and stigma distinctly brown; marginal cell divided; discoidal cells three, recurrent nervure, the two marginal and the two first discoidal cells of a clear yellow. Legs of a pure yellow at their base. Anterior legs, inferior moiety of posterior thighs and the posterior knees, having on their superior side a black longitudinal mark; posterior tarsi black."

It is possible that the word "discoidal" is here used by mistake for cubital as it is not usual to mention the discoidal cells in description. If there are four submarginal cells this is probably a *Macrophya*, allied to *M. californicus*. The *T. vaga* to which it is likened, is synonymus with *T. cincta*. (*Zonata*) of which there are two, one of which is an *Emphytus* and one *Tenthredo*.

### 39. *T. subcoerulea*.

*Tenthredo subcoerulea*, Esch., Entomog. Berlin, 1822, 96. 63.

"Black, with the back of abdomen blue-black, with the mandibles, palpi and legs pale.

"Isle of Unatashka, Russ. Am. Length 5 lines.

Similar to *T. mandibularis*. Head black; mandibles yellow, with the point brown and a black spot at their base. Palpi yellow; chaeron of some individuals having a yellow spot on each side. Antennæ a little longer than the corselet, filiform, black. Corselet dull black; dorsal granulation yellowish. Haunches with a yellow spot, abdomen shining black, of a blue black above. Wings longer than body, transparent, at sides and the nervures of a blackish brown. Legs yellow, at base black; the posterior pair with yellow spines, posterior tarsi brown."

The *T. mandibularis* to which this is said to be analogous is a true *Tenthredo*.

Hartig has specified another section of *Tenthredo*, *Synairema*, which differs only from *Tenthredo* in having the lanceolate cell closed. But one European species.